

AMENDMENT UNDER 37 C.F.R. § 1.116
Application No.: 09/808,015
Atty Docket No.: Q60826

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

Claims 1-3 (canceled).

Claim 4 (currently amended): ~~The particulate~~ Particulate titanium oxide ~~as claimed in claim 3,~~ comprising a mixed crystal titanium oxide containing rutile crystal produced by a vapor phase process, wherein the titanium oxide has a property represented by the following general formula (1)

$$\underline{R \geq 1,300 \times B^{-0.95}} \quad (1)$$

wherein R represents a rutile content (%) measured by an X-ray diffraction method and B represents a BET specific surface area (m²/g), which ranges from about 15 to about 115 m²/g, wherein the titanium oxide has a 90% cumulative weight particle size distribution diameter D90 measured by a laser diffraction-type particle size distribution measuring method of about 2.5 μm or less, and

wherein the titanium oxide has a distribution constant n according to Rosin-Rammler formula of about 1.5 or more.

Claim 5 (original): A production process for producing particulate titanium oxide, comprising subjecting a titanium tetrachloride diluted gas obtained by diluting titanium tetrachloride to from about 10% by volume or more to about 90% by volume or less with an inert gas to high temperature oxidation with an oxidizing gas containing oxygen or steam, or both,

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wherein the titanium tetrachloride diluted gas and the oxidizing gas, each preheated to about 900°C or more, are supplied into reaction tube at a flow rate of about 20 m/sec or more and allowed to react for a time of residence at high temperatures above about 700°C of about 3 seconds or less.

Claim 6 (original): The production process as claimed in claim 5, wherein use is made of a titanium tetrachloride diluted gas obtained by diluting titanium tetrachloride to about 20% by volume or more and about 80% by volume or less with an inert gas.

Claim 7 (original): The production process as claimed in claim 5, wherein the temperatures for preheating the titanium tetrachloride and the oxidizing gas are each about 1,000°C or more.

Claim 8 (original): The production process as claimed in claim 5, wherein the titanium tetrachloride diluted gas and oxidizing gas are supplied to the reaction tube through a coaxial parallel flow nozzle having an inner tube, the inner tube having an inner diameter of about 50 mm or less.

Claim 9 (canceled).

Claim 10 (currently amended): A titanium oxide composition comprising particulate titanium oxide as claimed in claim 3 4.

Claim 11 (canceled).